



SERVICE INFORMATION LETTER

AVOX Systems Inc., 225 Erie Street, Lancaster NY 14086-9502 USA
Tel: 716-683-5100 • Fax: 716-681-1089 • Vendor Code: 53655

US DOT RULE CHANGE REQUIRES REPLACEMENT OF PRESSURE RELIEF DEVICE (ALSO REFERRED TO AS SAFETY OUTLET) ON CERTAIN P/N 800112 SERIES CYLINDER AND REGULATOR ASSEMBLIES (CRA'S) IN ORDER TO SHIP BY AIR AS CARGO OR COMPANY OWNED MATERIAL (COMAT) WHEN FILLED WITH OXYGEN.

SUMMARY

US DOT has issued a new rule governing the shipment of cylinder and regulator assemblies containing oxygen by air as cargo or COMAT after October 1, 2008. The new rule requires a pressure relief device (PRD) with a pressure range from 90 to 100 percent of the cylinder test pressure for cylinder type 3AA. Some AVOX Systems CRA's were manufactured with a PRD that does not conform to the new rule.

1. PLANNING INFORMATION

A. Effectivity

(1) Concerned equipment

This Service Information Letter applies to the P/N 800112 Series CRA's listed in Table 1, some of which may have been supplied as part of kits for installing the CRA in aircraft.

NOTE: Table 2 shows the end item P/N's that are included in each kit. CRA's installed in an aircraft as part of the required equipment for flight are not affected by this SIL unless a CRA is removed and offered for shipment by air as cargo or COMAT.

Table 1
End Item P/N's of Affected P/N 800112 Series CRA's

CRA P/N
800112-01
800112-12
800112-20
800112-21
800112-24

(2) Aircraft

At the time of this Service Information Letter the affected items were known to be operating on Piper aircraft.

(3) On production line

CRA's manufactured after January 1, 2008 will have a new safety outlet attached to the regulator.

(4) This Service Information Letter also applies to all units held in stores for service on the aircraft listed in (2).



B. Reason

- (1) The new US DOT rule (US 49 CFR 173.302(f)) changes the rating of the PRD on a charged CRA when offered for transport aboard an aircraft as cargo or COMAT after the time of the first hydrostatic test and requalification following October 1, 2008.
- (2) This new rule does not affect CRA's installed in aircraft as part of the required equipment for flight unless the CRA is removed and offered for shipment by air as cargo or COMAT.
- (3) It is recommended that the PRD be changed to comply at the next hydrostatic test, but no later than the first hydrostatic test after October 1, 2008.

C. Description

- (1) At the next hydrostatic test, but no later than the first hydrostatic test after October 1, 2008, replace a non-compliant PRD with a PRD that complies with the new rule. There is one PRD on a CRA.
- (2) Install a label on the cylinder to indicate that the cylinder complies with the new rule.

D. Compliance

This Service Information Letter must be accomplished at the first scheduled hydrostatic test and requalification after October 1, 2008 to enable the changed CRA to be transported as cargo or COMAT aboard aircraft.

E. Manpower

- (1) One Technician
- (2) Estimated time: 30 minutes. (No additional manpower will be required if the unit is being overhauled).

2. MATERIAL INFORMATION

A. Material – Availability

See Table 2

B. Industry Support Information

Not applicable.

C. Material Necessary for Each Unit

Table 2 lists the parts necessary to accomplish this SIL.

(1) Material to be Purchased

One of the safety outlets in Table 2 is required for each CRA to be accomplished. Contact a location in section 4. APPENDIX of this SIL for prices.

Table 2
Required Materials

Affected CRA P/N	New Safety Outlet P/N	Qty	Label P/N (min qty=10)	Qty	Label P/N (min qty=10)	Qty	Avail.
800112-01	6552-00	1	10014464	1	2824-00	1	90 days
800112-12	6552-00	1	10014464	1	2824-00	1	90 days
800112-20	800659-07	1	10014464	1	2824-00	1	90 days
800112-21	6552-00	1	10014464	1	2824-00	1	90 days
800112-24	6552-00	1	10014464	1	2824-00	1	90 days

D. Re-identified Parts

The regulator will be re-identified by stamping the new P/N on the replacement identification label P/N 2824-00 (see Table 3 and Figure 3) with a steel stamp of approximately 1/8 inch (3 mm) character size.

Table 3
Conversion of Regulator and Safety Outlet Part Numbers

Affected CRA P/N	Also In Kit P/N	Old Regulator P/N	Revised Regulator P/N	Old Safety Outlet P/N	New Safety Outlet P/N
800112-01	800425-01 802889-04	800114-04	800114-15	6552-03	6552-00
800112-12	802889-02	800114-04	800114-15	6552-03	6552-00
800112-20	n/a	800114-09	800114-20	800659-04	800659-07
800112-21	802889-03	800114-03	800114-14	6552-03	6552-00
800112-24	805352-01 805352-02	800114-12	800114-22	6552-03	6552-00

3. ACCOMPLISHMENT INSTRUCTIONS

WARNING: FAILURE TO FOLLOW THE PROCEDURES IN THIS SERVICE INFORMATION LETTER, INCLUDING BUT NOT LIMITED TO FAILURE TO READ AND HEED THE WARNINGS IN THIS SERVICE INFORMATION LETTER, OR ATTEMPTING TO PERFORM ANY OF THE PROCEDURES IN THIS SERVICE INFORMATION LETTER UNLESS TRAINED IN THE PROPER USE AND MAINTENANCE OF AVIATION OXYGEN EQUIPMENT, MAY RESULT IN AN EXPLOSION, ILLNESS, SERIOUS PERSONAL INJURY, OR DEATH.

- A. Read and understand all the information in this Service Information Letter before performing any procedures on the CRA. Perform all procedures in the sequence of operations given. Do not attempt to perform any of the procedures in this Service Information Letter unless you are trained and qualified in the proper use and maintenance of aviation oxygen equipment. Maintenance personnel must know how to avoid the hazards of maintaining aviation oxygen equipment and must comply with all applicable government regulations.

WARNING: FAILURE TO CONTROL HIGH PRESSURE GASEOUS OXYGEN MAY RESULT IN SERIOUS PERSONAL INJURY OR DEATH.

- B. High pressure oxygen is a hazardous material. When pressurized oxygen is discharged intentionally or due to equipment failure, the released energy can be highly destructive if not properly controlled. Do not perform any procedure on an unsecured, charged, cylinder assembly. Also, while oxygen is not a flammable material, it will accelerate combustion and must be considered a fire hazard. Refer to paragraph 3.C. below.

WARNING: CONTAMINATION OF OXYGEN EQUIPMENT BY FAILING TO HANDLE OXYGEN EQUIPMENT IN AN AREA CLEAN OF OIL, GREASE, FLAMMABLE SOLVENTS, OR OTHER COMBUSTIBLE MATERIALS INCLUDING DUST, LINT, AND FINE METAL PARTICLES; CONTAMINATION FROM FAILING TO USE CLEAN HANDS, GLOVES, TOOLS; OR CONTAMINATION BY ANY OTHER MEANS, WHEN HANDLING OXYGEN EQUIPMENT, MAY RESULT IN FIRE OR EXPLOSION THAT MAY CAUSE SERIOUS PERSONAL INJURY OR DEATH.

- C. If oxygen equipment becomes contaminated with oil, grease, flammable solvents, or other combustible materials, fire and explosion may occur. Also, many substances and materials that do not normally burn in air, including dust, lint, and fine metal particles can ignite in the presence of oxygen. Handle oxygen equipment only in a clean area and with clean hands, gloves, and tools.

WARNING: FAILURE TO USE ONLY OXYGEN COMPATIBLE PRODUCTS, EQUIPMENT, AND MATERIALS WHEN CARRYING OUT THE PROCEDURES IN THIS SIL, CAN BRING ABOUT A VIOLENT REACTION RESULTING IN FIRE OR EXPLOSION THAT MAY CAUSE SERIOUS PERSONAL INJURY OR DEATH.

- D. Many commonly used materials may react violently in the presence of high pressure oxygen. Only equipment and materials known to be compatible with oxygen should be used. Do not substitute other equipment or materials such as elastomeric o-rings, gaskets, seals, and metal components, even if they look the same.

WARNING: FAILURE TO USE EYE PROTECTION AT ALL TIMES DURING SERVICE OR OVERHAUL PROCEDURES DESCRIBED IN THIS MANUAL MAY CAUSE INJURY TO THE EYES.

- E. Use eye protection at all times during all service or overhaul procedures.

WARNING: FAILURE TO FULLY DISCHARGE THE OXYGEN FROM THE CRA, COMPONENT PARTS, OR TEST SETUP PRIOR TO DISASSEMBLY OF ANY PART MAY CAUSE SERIOUS PERSONAL INJURY OR DEATH.

- F. High pressure oxygen is a hazardous material. When pressurized oxygen is discharged intentionally or due to equipment failure, the released energy can be highly destructive if not properly controlled. Fully discharge the oxygen from the CRA, component parts, and test setup prior to disassembly of any part.

NOTE: This SIL is to be accomplished off-wing. Do not use manual H-137 for the replacement of the safety outlet. Follow the steps below to remove the old safety outlet and install the new safety outlet. This SIL may be accomplished during a hydrostatic test, an overhaul, a repair or strictly for the replacement of the safety outlet.

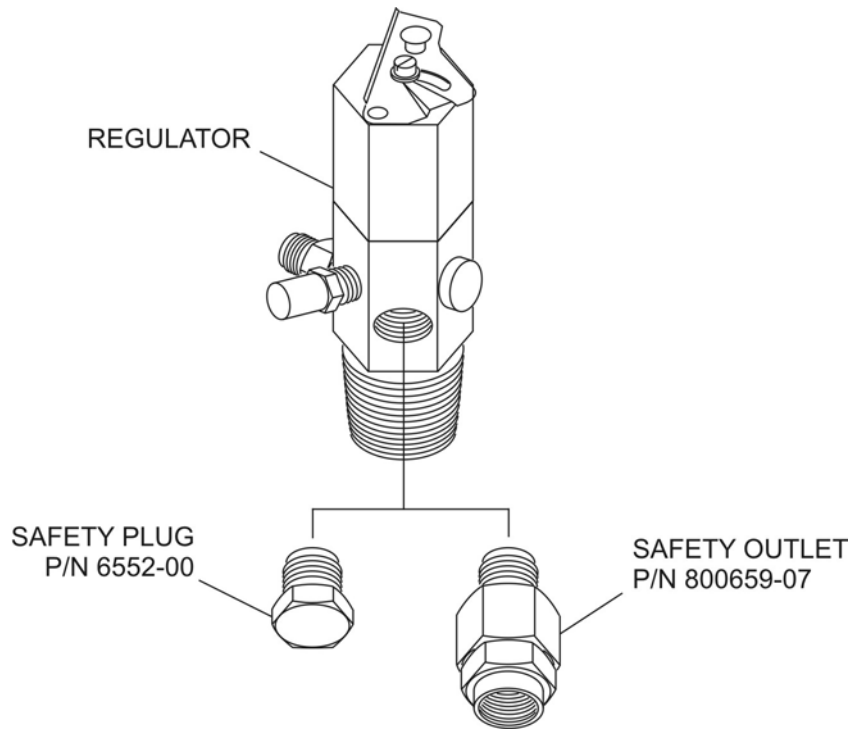
- G. In a clean, grease-free area, bleed the oxygen from the cylinder.



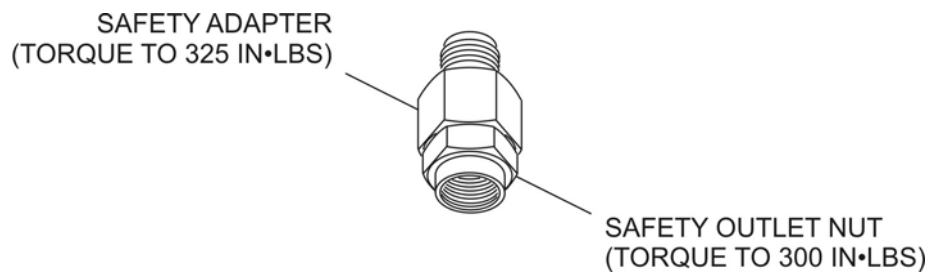
- H. Removal of the valve from the cylinder is optional.
- I. Remove the safety outlet assy or safety plug and discard.
- J. Apply a light film of oxygen lubricant to the sealing surfaces of the safety adapter or the safety plug.
- K. Thread the new safety adapter or safety plug into the regulator and torque the assy to 325 in•lbs (36.7 N•m). See Figure 1.
- L. For the safety outlet assy only, hold the safety adapter with a wrench and torque the safety outlet nut to 300 in•lbs (33.9 N•m). See figure 2.
- M. Re-identify the regulator.
 - (1) Stamp the S/N from the current identification label onto the replacement identification label P/N 2824-00 (see Figure 3) with a steel stamp of approximately 1/8 inch (3 mm) character size.
 - (2) Stamp the revised P/N from Table 3 onto the replacement identification label P/N 2824-00 (see Figure 3) with a steel stamp of approximately 1/8 inch (3 mm) character size.
 - (3) Remove the current identification label from the regulator.
 - (4) Attach the replacement identification label P/N 2824-00 to the regulator in place of the label that was removed.
- N. Use the appropriate technical documents to complete the hydrostatic test, overhaul, or repair if required or do a leak test.
- O. After the service has been completed, attach the P/N 10014464 Label (Figure 4) to the cylinder in the location shown in Figure 5.

NOTE: On smaller cylinders the label can be placed in a location just below the identification label.

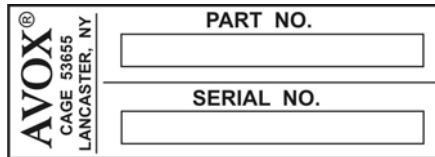
NOTE: Locate the label P/N 10014464 so that it will not be covered by the mounting band that will hold the cylinder after installation.
- P. Affected units listed in Table 1 can be shipped in an empty condition to an authorized repair facility listed in the 4. Appendix to have the SIL accomplished.



Install the Safety Outlet or Safety Plug
Figure 1



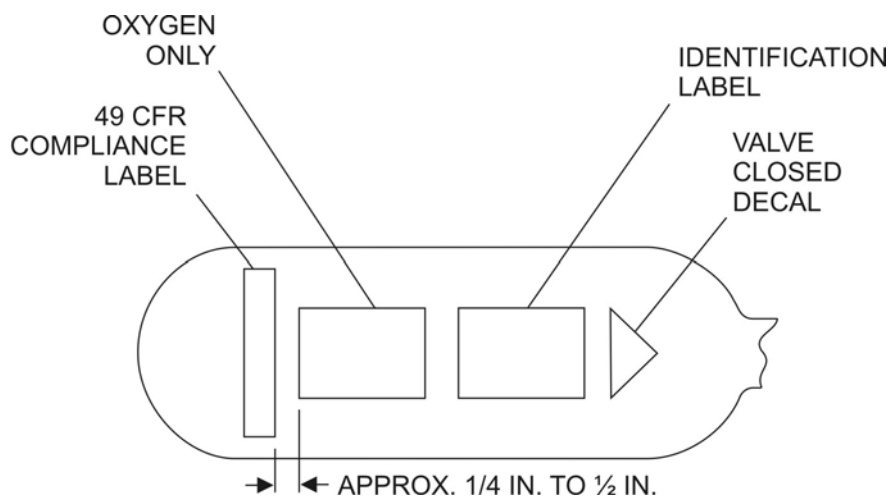
Safety Outlet Installation
Figure 2



Replacement Identification Label P/N 2824-00
Figure 3

**THIS CYLINDER IS EQUIPPED WITH
A PRESSURE RELIEF DEVICE THAT
MEETS THE REQUIREMENTS OF
US 49 CFR 173.302(f)(2)**

US DOT Compliance Label P/N 10014464
Figure 4



Location of the Compliance Label on the Cylinder
Figure 5



AVOX Systems

4. APPENDIX

Contact Information:

AVOX Services Inc.
225 Erie Street
Lancaster, NY 14086-9502 USA
Tel: 716-683-5100
Fax: 716-681-1089

IN-Services Asia
80 Chun Choi Street
Tseung Kwan O Industrial Estate
New Territories
Hong Kong, China

General Manager
Sebastien WEBER
Email: weber.inasia@haeco.com
Customer Support Administration-
Shirley Huen
Email: huen.inasia@haeco.com
Phone: (852) 2260 4050
Fax: (852) 2260 4052

AVOX-EROS Services
6734 Valjean Ave
Van Nuys, CA 91406
Phone: 818-787-3852
Fax: 818-435-0992
Jean-Marc LeMaitre
Director of Marketing & Customer
Relations
Email: ptaylor@avox-eros.zodiac.com
818-435-0911

91958 Courtaboeuf Cedex
France

Customer Services
Celine Robitaille
Phone: 33 1 64 86 69 19
Email: crobitaille@intertechnique.zodiac.com

IN-Services (Middle East)
Abu Dhabi International Airport
P.O. Box 106675
Cargo Village Area
Abu Dhabi, U.A.E.

GM and Sales Manager
Boulouafi Bouach
Phone: (971) 2 672 5257
Email: bbouach@inservices-alrumaithy.com

IN-Services Europe
7, Avenue du Parana
B.P. 303